

ntors:

Frank L. Greenway et al.

Serial No:

10/559.091

35 U.S.C. § 371 Date: November 22, 2005

Title:

Angiogenic Agents from Plant Extracts, Gallic Acid, and Derivatives

Atty Docket:

Greenway 02P01-US

Commissioner for Patents

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Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

In accordance with the duty of candor and good faith imposed by 37 C.F.R. §1.56 and means of complying therewith according to 37 C.F.R. §§1.97 and 1.98, the references listed on the attached Information Disclosure Citation are called to the attention of the United States Patent and Trademark Office in connection with the above-identified patent application. Copies of the cited references are enclosed herewith. No admission is made that the cited art represents the prior art or that the cited art is the most material art.

The Office is urged to consider the cited references and to make an independent decision with respect to their materiality.

Respectfully submitted,

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May 3, 2006

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| | HITORMATIO | N DIS | CLOSU | IRE CITATION | Application Number | 10/559,091 |
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| | anne / | | | | First Named Inventor | Frank L. Greenway |
| | N 08 1000 B | | | | Art Unit | |
| 3 | AY 0 8 2006 P | | | | Examiner Name | |
| ٦ | TRABENEET | 1 | of | 3 | Attorney Docket No. | Greenway 02P01-US |

| U.S. PATENT DOCUMENTS | | | | | | |
|--|-----------|-------|----------------|-----|--------|-----------|
| Exam. Initial Document No. Date Name Class Sub | | | | | Subcl. | File Date |
| | 6,544,947 | 04/03 | Holaday et al. | 512 | 2 | |
| | 6,524,625 | 02/03 | Hajime Aga | 424 | 195.1 | |
| | 6,444,236 | 09/03 | Han | 424 | 725 | |
| | 6,440,448 | 08/02 | Intelisano | 424 | 439 | |
| | 6,200,568 | 04/01 | Wu | 251 | 114 | |

Note: Copies of U.S. Patents are not enclosed. See OG Notice of August 5, 2003.

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|--|--|-----------------------------|---------------|--|--|
| Exam. Initial | Foreign Patent Document Country Code / Number / Kind | Publication Date Name of Patentee or Applicant of Cited Document | | Translation ? | | |
| | EP / 727218 / APP | 08-21-96 | Nakahara, K. <i>et al</i> . | | | |
| | | | | | | |

| | OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.) |
|---|--|
| | Bicknell, R., "Vascular targeting and the inhibition of angiogenesis," Annals of Oncology, vol. 5, pp. 45-50 (1994) |
| | Colored Illustrations of Chinese Traditional and Herbal Ordinary Drugs in China, Wu Jianrong and Qiu Dewen, editors; Guizhou Technology and Science Press, Guiyang, China, 8 pgs. (1993) |
| | Creamer, D. et al., "Overexpression of the angiogenic factor platelet-derived endothelial cell growth factor/thymidine phosphorylase in psoriatic epidermis," Br. J. Dermatol., Vol. 137, pp. 851-855 (1997) |
| | Eerola, AK. et al., "Tumour infiltrating lymphocytes in relation to tumour angiogenesis, apoptosis and prognosis in patients with large cell lung carcinoma," Lung Cancer, Vol. 26, pp. 73-83 (1999) |
| | Encyclopedia of Traditional Chinese Medicine, Shanghai S&T Press, 47 pgs. (1986) |
| | Gao, F. et al., "19α-hydroxyursane-type triterpene glucosyl esters from the roots of Rubus suavissimus S. Lee," Chem. Pharm. Bull., Vol. 33, pp. 37-40 (1985) |
| , | Gasparini, G, "The rationale and future potential of angiogenesis inhibitors in neoplasia," Drugs, Vol. 58, no. 1, pp. 17-33 (1999) |

| EXAMINER SIGNATURE | DATE CONSIDERED | |
|--------------------|-----------------|--|
| | | |
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* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw a line through the citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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| INFORMAT | ION DIS | CLOS | JRE CITATION | Application Number | 10/559,091 |
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| | | | | First Named Inventor | Frank L. Greenway |
| | | | | Art Unit | |
| | | | | Examiner Name | |
| Sheet | 2 | of | 3 | Attorney Docket No. | Greenway 02P01-US |

| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.) |
|--|
| Glick, Z. et al., "Effect of Tannic Acid and Related Compounds on the Absorption and Utilization of Proteins in the Rat," J. Nutrition, Vol. 100, no. 5, pp. 516-520 (1970) |
| Glick, Z. et al., "Food Intake Depression and Other Metabolic Effects of Tannic Acid in the Rat," J. Nutrition, Vol. 100, no. 5, pp. 509-515 (1970) |
| Glick, Z., "Modes of Action of Gallic Acid in Suppressing Food Intake of Rate," J. of Nut., Vol. 111, No. 11, pp. 1910-1916 (1981) |
| Hirono, S. et al., "Sweet and Bitter Diterpene-glucosides from Leaves of Rubus suavissimus," Chem. Pharm. Bull., Vol. 38, no. 6, pp. 1743-1744 (1990) |
| Huang, PF. et al., "Complex Utilization of Rubus suavissimus S. Lee," Guangxi Chemical Industry, Vol. 31, no. 2, pp. 24-25 (2002) |
| Isuzugawa, K. et al., "Different Generation of Inhibitors Against Gallic Acid-induced Apoptosis Produces Different Sensitivity to Gallic Acid," Biol. Pharm. Bull., Vol. 24, no. 3, pp. 249-253 (2001) |
| Kawada, M., "Anti-tumor effect of gallic acid on LL-2 lung cancer cells transplanted in mice," Anticancer Drugs, Vol. 12, pp. 847-852 (2001) |
| Kotaro, U., "Antiallergy action of Rubus suavissimus," Shokuhin Kogyo, Vol. 40, pp. 52-59 (1997) |
| Liu, D. et al., "Studies on Chemical Constituents from <i>Tetrastigma hypoglaucum</i> ," Chinese Trad. And Herbal Drugs, Vol. 34, no. 1, pp. 4-6 (2003) |
| Liu, Z. et al., Encyclopedia of Woody Medicinal Plants of China, CD-ROM, Academic Services Associates, Inc., Seattle, Washington (2000 |
| Lu, J. et al., "Differential Effects of Theaflavin Monogallates on Cell Growth, Apoptosis, and Cox-2 Gene Expression in Cancerous Versus Normal Cells," Cancer Research, Vol. 60, pp. 6465-6471 (2000) |
| Maniotis, A.J. et al., "Vascular Channel Formation by Human Melanoma Cells in Vivo and in Vitro: Vasculogenic Mimicry," Am. J. Pathol., Vol. 155, no. 3, pp. 739-752 (1999) |
| Nakahara, K., "Anti-allergic activity of Tiencha and oolong tea polyphenols," Food Style 21, Vol. 2, pp. 45-49 (1998) |
| Nakamura, E.S. et al., "Cancer chemopreventive effects of constituents of Caesalpinia ferrea and related compounds," Cancer Lett., Vol. 177, pp. 119-24 (2002) |

| EXAMINER SIGNATURE | DATE CONSIDERED |
|--------------------|-----------------|
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^{*} EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw a line through the citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| Substitute f 1449A/I | | | nt and Trademark Office partment of Commerce | СОМР | PLETE IF KNOWN |
|-------------------------|---------------|--------------|--|----------------------|-------------------|
| INFORMAT | TION DIS | CLOSI | JRE CITATION | Application Number | 10/559,091 |
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| Sheet | 3 | of | 3 | Attorney Docket No. | Greenway 02P01-US |

| | OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.) |
|-----|--|
| | Ohno, T. et al., "Cytotoxic activity of gallic acid against liver metasis of mastocytoma cells P-815," Anticancer Res., Vol. 21, pp. 3875-80 (2001) |
| | Ohtani, K. et al., "Minor Diterpene Glycosides from Sweet Leaves of Rubus suavissimus," Phytochemistry, Vol. 31, no. 5, pp. 1553-1559 (1992) |
| | Ono, Y., "The health beneficial effects of Tien-cha (<i>Rubus suavissimus</i> tea) and its applications," Food Style 21, Vol. 6, pp. 77-80 (2002) |
| | Panizzi, L. et al., "In Vitro Antimicrobial Activity of Extracts and Isolated Constituents of Rubus Ulmifolins," J. Ethnopharmacol., Vol. 29, pp. 165-8 (2002) |
| | Polewski, K. et al., "Gallic Acid, a Natural Antioxidant, in Aqueous and Micellar Environment: Spectroscopic Studies," Current Topics in Biophysics, Vol. 26, no. 2, pp. 217-227 (2002) |
| *** | Rosen, L, "Antiangiogenic Strategies and Agents in Clinical Trials," Oncologist, Vol. 5, supplement 1, pp. 20-27 (2000) |
| | Rupnick, M.A. et al., "Adipose Tissue Mass Can Be Regulated Through the Vasculature," PNAS, Vol. 99, no. 16, pp. 10730-10735 (2002) |
| | Seto, T. et al., "β-Glucosyl Esters of 19α-hydroxyursolic Acid Derivatives in Leaves of Rubus species," Phytochemistry, Vol. 23, no. 12, pp. 2829-2834 (1984) |
| | Tanaka, T. et al., "Rubusoside (β-D-glucosyl ester of 13-O-β-D-glucosyl-steviol), a Sweet Principle o Rubus chingii Hu (Rosaceae)," Agric. Biol. Chem., Vol. 45, no. 9, pp. 2165-2166 (1981) |
| | Wenger, F.A. et al., "Tumor Size and Lymph-node Status in Pancreatic Carcinoma Is There a Correlation to the Preoperative Immune Function?," Langenbecks Archives of Surgery, Vol. 384, pp. 473-478 (1999) |
| | Wolfe, K. et al., "Antioxidant Activity of Apple Peels," J. Agric. Food Chem., Vol. 51, pp. 609-614 (2003) |
| | Yang, G.Y. <i>et al.</i> , "Effect of Black and Green Tea Polyphenols on C-jun Phosphorylation and H ₂ o ₂ Production in Transformed and Non-transformed Human Bronchial Cell Lines: Possible Mechanisms of Cell Growth Inhibition and Apoptosis Induction," Carcinogenesis, Vol. 21, no. 11, pp. 2035-2039 (2000) |
| | Zhou, WH. et al., "A New Sweet Diterpene-glucoside in Leaves of Rubus suavissimus, "" Acta Botanica Sinica, Vol. 34, no. 4, pp. 315-318 (1992) |
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| EXAMINER SIGNATURE | DATE CONSIDERED |
|--------------------|-----------------|
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